(No Model.)

F. F. MOORE.

AUTOMATIC SWITCH THROW FOR STREET RAILWAYS.

No. 532,804. Patented Jan. 22, 1895.

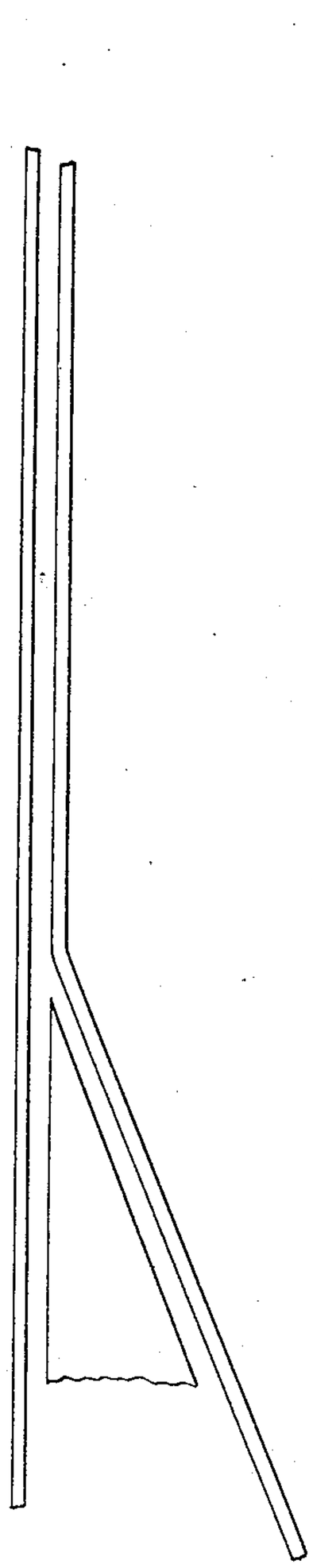

Fig. 1.

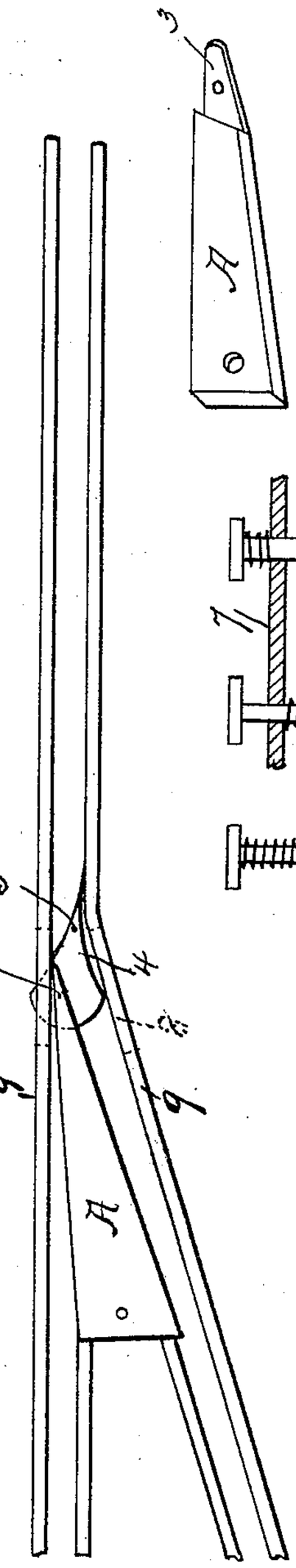

Fig. 2.

Fig. 3.

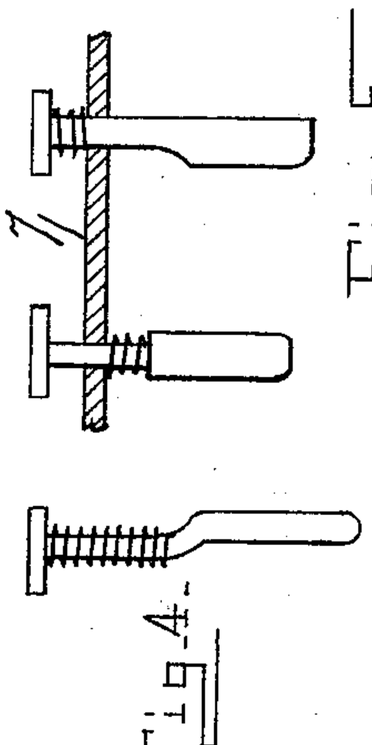

Fig. 4.

Fig. 5.

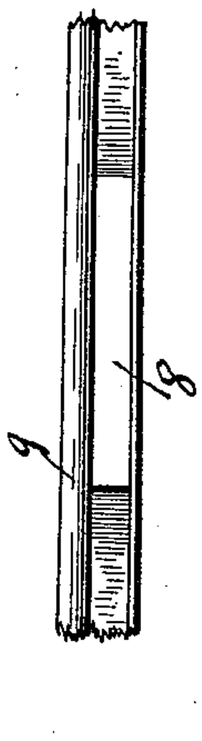

Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

FRANK F. MOORE, OF ATLANTA, GEORGIA.

AUTOMATIC SWITCH-THROW FOR STREET-RAILWAYS.

SPECIFICATION forming part of Letters Patent No. 532,804, dated January 22, 1895.

Application filed March 27, 1894. Serial No. 505,319. (No model.)

To all whom it may concern:

Be it known that I, FRANK F. MOORE, a citizen of the United States of America, residing at Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Automatic Switch-Throws for Street-Railways, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in switches and particularly to that class known as automatic switches for tramways, of which the following is such a full, clear, and exact description as will enable others skilled in the art to which it appertains to make and use the same.

The object of the invention is to provide switch pieces that may be readily and positively operated by the motorman or driver with slight exertion and without the necessity of leaving the car or decreasing the speed thereof.

A further object of the invention is to accomplish the foregoing result by a device embodying a simple construction and one that shall be strong and durable, efficient and satisfactory in use and at the same time comparatively inexpensive to manufacture.

With these and other objects in view the invention consists in the various novel details of construction, arrangement, and combination of parts to be hereinafter more fully described, and specifically pointed out in the claims.

In describing the invention in detail reference is had to the accompanying drawings forming a part of this specification, and wherein like characters indicate corresponding parts in the several views, in which—

Figure 1, is a plan view of a section of a track with my novel actuating mechanism in place. Fig. 2, is a detail view of the switch throw. Fig. 3, is a detail view in perspective of the bottom of the frog. Fig. 4, is a view in side elevation of the switch pin. Fig. 5, is a similar view of a modified form of pin. Fig. 6, is a view in side elevation of a section of a rail.

In the drawings the rails are of ordinary arrangement. Hence a detail description of them is deemed unnecessary.

The switch tongue A, is also of the same general construction as those ordinarily employed except at the reduced end and on the under side the surface is cut away forming a recess 3, in which is adapted to fit the throw or lever 4. This throw 4 is formed approximately in the shape of an arrow-head and is pivoted to the bed-plate at 5, and to the frog at 6. Thus it will be seen as the throw is struck by the switch pin which is secured to the platform 7, of the car it will be thrown on its pivot 5, carrying with it the switch-tongue; the rails 9 being cut away to form a groove 8 through which the corners of the throw pass without obstruction.

By reason of the simplicity of the construction and operation an enlarged description is thought unnecessary as it will be readily understood from the foregoing. The switch pin cannot miss the throw as the throw extends diagonally across the path of travel of the switch pin, the end at all times resting against one side or the other of the rail.

It will be seen that in order to continue on the main track here illustrated the throw should be arranged to point toward the inside rail while its being adjusted in the opposite direction would guide the car off on the side, the throw pointing at an angle to the direction of the frog.

The switch pins are illustrated by Figs. 4 and 5. That shown by Fig. 4, illustrates a form having an angular bend which engages the sides of the throw and in doing so turns in the spring as will be obvious. Fig. 5, is made of thin steel capable of bending from the spring down so it may take either side of the switch throw without strain.

It is particularly noted that various changes may be made in the details of construction without departing materially from the general idea involved.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a railway switch the combination with a frog, of a throw extending diagonally across

the space between the main and switch rails and designed to enter slots in the sides of the rails said main and switch rails having slots to receive the corners of the throw for the purpose described.

2. In a railway switch the combination with the frog, of a throw pivoted to the bed-plate and frog, the corners of said throw entering grooves in the side of the rails for the purpose described.

3. A railway switch throw pivoted in the space between the rails and its sides working in slots, in combination with the frog to which it is pivoted substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

FRANK F. MOORE.

Witnesses:

W. J. VAN DYKE,

FELIX CAMP.